



SEQUENCE LISTING

E3

<110> MANDELKOW ET AL.

<120> NOVEL TOOLS FOR THE DIAGNOSIS AND TREATMENT OF ALZHEIMER'S DISEASE

<130> 28384/36668

<140> US 09/640,737

<141> 2000-08-17

<150> US 08/244,603

<151> 1994-06-03

<160> 37

<170> PatentIn version 3.1

<210> 1

<211> 441

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Glu Pro Arg Gln Glu Phe Glu Val Met Glu Asp His Ala Gly
1 5 10 15

Thr Tyr Gly Leu Gly Asp Arg Lys Asp Gln Gly Gly Tyr Thr Met His
20 25 30

Gln Asp Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu
35 40 45

Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser
50 55 60

Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val
65 70 75 80

Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Gln Pro His Thr Glu
85 90 95

Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro
100 105 110

Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val
115 120 125

Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly
130 135 140

Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro
145 150 155 160

Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro
 165 170 175
 Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly
 180 185 190
 Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser
 195 200 205
 Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys
 210 215 220
 Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys
 225 230 235 240
 Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val
 245 250 255
 Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly
 260 265 270
 Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Leu Ser Asn Val Gln
 275 280 285
 Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly
 290 295 300
 Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser
 305 310 315 320
 Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln
 325 330 335
 Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser
 340 345 350
 Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn
 355 360 365
 Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala
 370 375 380
 Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser
 385 390 395 400
 Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser
 405 410 415
 Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val
 420 425 430

Ser Ala Ser Leu Ala Lys Gln Gly Leu
435 440

<210> 2
<211> 6
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 2

Lys Glu Ser Pro Leu Gln
1 5

<210> 3
<211> 7
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 3

Tyr Ser Ser Pro Gly Ser Pro
1 5

<210> 4
<211> 6
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 4

Pro Gly Ser Pro Gly Thr
1 5

<210> 5
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 5

Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser
1 5 10

<210> 6
<211> 6
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 6

Pro Lys Ser Pro Ser Ser
1 5

<210> 7

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 7

Tyr Lys Ser Pro Val Val Ser
1 5

<210> 8

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 8

Gly Asp Thr Ser Pro Arg His
1 5

<210> 9

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 9

Met Val Asp Ser Pro Gln Leu
1 5

<210> 10

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 10

Pro Leu Gln Thr Pro Thr Glu
1 5

<210> 11

<211> 12

<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 11
Leu Lys Glu Ser Pro Leu Gln Thr Pro Thr Glu Asp
1 5 10

<210> 12
<211> 7
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 12

Ala Lys Ser Thr Pro Thr Ala
1 5

<210> 13
<211> 7
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 13

Ile Gly Asp Thr Pro Ser Leu
1 5

<210> 14
<211> 8
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 14

Lys Ile Ala Thr Pro Arg Gly Ala
1 5

<210> 15
<211> 7
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 15

Pro Ala Lys Thr Pro Pro Ala
1 5

<210> 16
<211> 7
<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 16

Ala Pro Lys Thr Pro Pro Ser
1 5

<210> 17

<211> 13

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 17

Pro Ala Lys Thr Pro Pro Ala Pro Lys Thr Pro Pro Ser
1 5 10

<210> 18

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 18

Ser Pro Gly Thr Pro Gly Ser
1 5

<210> 19

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 19

Arg Ser Arg Thr Pro Ser Leu
1 5

<210> 20

<211> 7

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 20

Ser Leu Pro Thr Pro Pro Thr
1 5

<210> 21

<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 21

Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr
1 5 10

<210> 22
<211> 7
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 22

Val Val Arg Thr Pro Pro Lys
1 5

<210> 23
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 23

Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala
1 5 10

<210> 24
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 24

Lys Ile Gly Ser Thr Glu Asn Leu Lys
1 5

<210> 25
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 25

Lys Cys Gly Ser Lys Asp Asn Ile Lys
1 5

<210> 26
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 26

Lys Cys Gly Ser Leu Gly Asn Ile His
1 5

<210> 27
<211> 10
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 27

Lys Ile Gly Ser Leu Asp Asn Ile Thr His
1 5 10

<210> 28
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<223> Q244-E372 of htau23

<400> 28

Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser Arg Ser Arg Thr Pro
1 5 10 15

Ser Leu Pro Thr Pro Pro Thr
20

<210> 29
<211> 15
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 29

Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser Arg
1 5 10 15

<210> 30
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<223> Microtubule binding repeat

<400> 30

Val Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly
1 5 10 15

Gly Gly Lys

<210> 31
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<223> 24-49 of htau40

<400> 31

Lys Asp Gln Gly Gly Tyr Thr Met His Gln Asp Gln Glu Gly Asp Thr
1 5 10 15

Asp Ala Gly Lys Leu Lys Glu Ser Pro Leu Gln
20 25

<210> 32
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<223> 191-209 of htau40

<400> 32

Ser Gly Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro
1 5 10 15

Gly Ser Arg

<210> 33
<211> 10
<212> PRT
<213> Homo sapiens

<220>
<223> 231-240 of htau40

<400> 33

Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys
1 5 10

<210> 34
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<223> 396-406 of htau40

<400> 34

Ser Pro Val Val Ser Gly Asp Thr Ser Pro Arg
1 5 10

<210> 35
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<223> 386-406 of htau40
<400> 35

Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser Gly
1 5 10 15

Asp Thr Ser Pro Arg
20

<210> 36
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<223> 407-428 of htau40
<400> 36

His Leu Ser Asn Val Ala Ala Thr Gly Ala Ile Asp Met Val Asp Ser
1 5 10 15

Pro Gln Leu Ala Thr Leu
20

<210> 37
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<223> 260-266 of htau40
<400> 37

Ile Gly Ser Thr Glu Asn Leu
1 5